DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-012261 Address: 333 Burma Road **Date Inspected:** 24-Feb-2010

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No Li Yang **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as 6BE+6BE hold back weld. The weld designations reviewed are as follows:

6BE+6CE

- 1. DP517-001-5, 6
- 2. DP517-001-13, 14
- 3. SP607-001-25, 26, 35, 36
- 4. SP608-001-37, 38, 47, 48
- 5. SP308-001-29, 30, 41, 42
- 6. SP309-001-43, 44, 55, 56
- 7. SP362-001-25, 26, 35, 36
- 8. SP363-001-37, 38, 47, 48
- 9. SP335-001-25, 26, 35, 36

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- 10. SP336-001-37, 38, 47, 48
- 11. SP427-001-21, 22, 29, 30
- 12. SP428-001-17, 18, 25, 26
- 13. DP636-001-13, 14
- 14. DP637-001-7, 8
- 15. EP55-001-11, 12
- 16. EP55-001-9, 10
- 17. BP168-001-43, 44, 53, 54
- 18. BP169-001-37, 38, 47, 48
- 19. BP60-001-43, 44, 49, 50
- 20. BP61-001-37, 38, 43, 44

7BW+7AW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 002 located at OBW7B on counter weight side of segment. Welder is identified as Mr. Wang Jun (067752). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

6CW

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 085 and 086 located at SP516-001 panel point 44 on the cross beam side of segment. Welder is identified as Mr. Cao Xinglong (069683). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2112-FCM-1 and ABF-RFI-002004R00.

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 085 and 086 located at SP516-001 panel point 44 on the cross beam side of segment. Welder is identified as Mr. Li Bo (037779). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2112-FCM-1 and ABF-RFI-002004R00.

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 085 and 086 located at SP516-001 panel point 45 on the cross beam side of segment. Welder is identified as Mr. Du Henghua (037779). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2112-FCM-1 and ABF-RFI-002004R00.

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 085 and 086 located at SP516-001 panel point 45 on the cross beam side of segment. Welder is identified as Mr. Dong Youcan (067588). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2112-FCM-1 and ABF-RFI-002004R00.

6AW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 170 located at SSD10A-PP038 on the cross beam side of segment. Welder is identified as Mr. Dai Lu (048559). ZPMC QC is identified as Li

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Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR10687 repair procedure.

6BW+6CW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 004 located at OBW6C on cross beam side of segment. Welder is identified as Mr. Han Xiaofeng (054467). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-3G (3F)-FCM-Repair-1 and CWR 1209 R1 repair procedure.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions in the trial assembly yard. Locations and description of work are as followed:

6BW

1. Heat straightening was being performed on the edge plate I ribs weld joints EP89-001-009 and 012 per HSR1 (B)-8153.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle Testing (MT) Technician performed MT on various locations in the trial assembly yard. Locations are as followed:

6BW+6CW

1. MT being performed on side plate weld splice OBW6C-001 and 002 at counter weight side of segment.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer